

CLAIMS:

Cancel Claims 1-20 and amend claim 21 by entering the replacement claim shown below. The changes to claim 21 are
5 shown in the accompanying "Version with Markings to Show Changes Made".

SPECIFICATION

Kindly amend the specification by entering replacement
10 paragraphs from pages 1, 3 and 4 below. The changes made are shown in the accompanying "Marked-up Versions" and are described in the Remarks in the section titled "SPECIFICATION".

10023910-121801

REPLACEMENT CLAIM 21

B' 1 21. An epitaxial layer, comprising a metal nitride
2 comprising a metal selected from the group consisting
3 of gallium, aluminum and indium, wherein the epitaxial
4 layer is formed by hydride vapor-phase deposition on a
5 buffer layer and wherein the buffer layer comprises a
6 nitride of an element of groups III or IV of the
7 periodic table formed on a substrate by a technique
8 other than HVPE.

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MARKED UP VERSION OF AMENDED CLAIM SHOWING CHANGES MADE

1 21. (AMENDED) An epitaxial layer, comprising a metal
2 nitride comprising a metal selected from the group
3 consisting of gallium, aluminum and indium, wherein the
4 epitaxial layer is formed by hydride vapor-phase
5 deposition on a buffer layer and wherein the buffer
6 layer comprises a nitride of an element of groups III
7 or IV of the periodic table formed on a substrate by a
8 technique other than HVPE [method selected from the
9 group consisting of MOCVD, MBE or sputtering].

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REPLACEMENT PARAGRAPHS

Page 1, lines 7-13

DUAL PROCESS SEMICONDUCTOR HETEROSTRUCTURES

For

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Glenn S. Solomon, David J. Miller and Tetsuzo Ueda

CROSS REFERENCE TO A RELATED APPLICATION

This application is a division of and claims priority from
commonly assigned co-pending U.S. Patent Application serial
number 09/293,620, filed April 16, 1999 the entire
disclosure of which is incorporated herein by reference.

BACKGROUND OF THE INVENTION

Page 1, lines 7-13, MARKED-UP VERSION

DUAL PROCESS SEMICONDUCTOR HETEROSTRUCTURES [& METHODS]

For

Glenn S. Solomon, David J. Miller and Tetsuzo Ueda

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BACKGROUND OF THE INVENTION

REPLACEMENT PARAGRAPHS

Section Bridging Page 3, line 27 to page 4, line 9

SUMMARY OF THE INVENTION

5 The above delineated disadvantages associated with prior art methods for deposition of AlN/GaN heterostructures are addressed by the present invention, in which a buffer layer (e.g., AlN) and an epitaxial layer (e.g., GaN) are grown using different techniques, as will be described fully hereinbelow.

10 In view of the above, it is an object of the present invention to provide a semiconductor heterostructure and method of making the same.

15 Section Bridging Page 3, line 27 to page 4, line 9, MARKED-UP VERSION

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25 In view of the above, it is an object of the present invention to provide a semiconductor heterostructure and method of making the same.